

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Recordable~~ A recordable record carrier having a user area ~~(UA)~~ for storing user data and a management area ~~(MA)~~ for storing management data, said management area comprising:
a main file system area ~~(70)~~ for storing main file system data ~~(mFS)~~ of a main file system,
a virtual file system area ~~(71)~~ for storing virtual file system data ~~(vFS)~~ of a virtual file system in raw format, and
an indicator area ~~(72)~~ for storing an indicator ~~(ID)~~ indicating whether the main system data ~~(mFS)~~ and the virtual file system data ~~(vFS)~~ are consistent.

2. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said virtual file system area ~~(71)~~

comprises a static area for storing static parts of said virtual file system data and a volatile area for storing volatile parts of said virtual file system data ~~(vFS)~~ so that, if the indicator ~~(ID)~~ indicates an inconsistency between the main file system data ~~(mFS)~~ and the virtual file system data ~~(vFS)~~, only the volatile parts of the virtual file system data ~~(vFS)~~ need to be reconstructed from the main file system data ~~(mFS)~~.

3. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said indicator ~~(ID)~~ comprises the last update date of the main file system data ~~(mFS)~~ and of the virtual file system data ~~(vFS)~~.

4. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said indicator ~~(ID)~~ comprises a flag which is set when the virtual file system data ~~(vFS)~~ are updated, indicating that the virtual file system data ~~(vFS)~~ are valid, and which is reset when the main file system data ~~(mFS)~~ are updated independently, indicating that the virtual file system data ~~(vFS)~~ are invalid.

5. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said indicator area ~~(72)~~ is present in ~~an easily accessible location, in particular in a disk navigation area (DN),~~ in a logical volume integrity descriptor ~~(LVID)~~, or in a chip in the record carrier ~~(7)~~.

6. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said virtual file system area ~~(71)~~ further comprises a directory area for storing the directory structure of the virtual file system.

7. (Currently Amended) ~~Record~~ The recordable carrier as claimed in claim 1, wherein said main file system is a Universal Disc Format ~~(UDF)~~ file system, and wherein said virtual file system is a File Allocation Table ~~(FAT)~~ file system.

8. (Currently Amended) ~~Recording~~ A recording apparatus for recording information on a recordable record carrier ~~(7)~~ having a user area ~~(UA)~~ for storing user data and a management area ~~(MA)~~ for

storing management data, said apparatus comprising:

[[-]] recording means ~~(6)~~ for recording main file system data ~~(mFS)~~ of a main file system in a main file system area ~~(70)~~ of said management area ~~(MA)~~, virtual file system data ~~(vFS)~~ of a virtual file system in raw format in a virtual file system area ~~(71)~~ of said management area ~~(MA)~~, and an indicator ~~(ID)~~ indicating whether the main file system data ~~(mFS)~~ and the virtual file system data ~~(vFS)~~ are consistent in an indicator area ~~(72)~~ of said management area ~~(MA)~~,

[[-]] reading means ~~(6)~~ for reading said user data and said management data,

[[-]] memory means ~~(8)~~ for storing said virtual file system data ~~(vFS)~~,

[[-]] conversion means ~~(9)~~ for converting said main file system data ~~(mFS)~~ into said virtual file system data ~~(vFS)~~ and vice versa for storage on the record carrier ~~(7)~~ and/or for output to an external host device ~~(2, 3)~~ if said indicator ~~(ID)~~ indicates an inconsistency between the main file system data ~~(mFS)~~ and the virtual file system data ~~(vFS)~~, and

[[-]] an interface ~~(4, 5)~~ for communicating with a host

device ~~(2, 3)~~.

9. (Currently Amended) ~~Recording~~ The recording apparatus as claimed in claim 8, wherein said recording means ~~(6)~~ and said reading means ~~(6)~~ are adapted for accessing an optical disk ~~(7)~~, in particular a small form factor optical disk using a universal disc format, and wherein said interface ~~(4)~~ is adapted for communicating with a compact flash form factor drive ~~(2)~~ using a file allocation table system.

10. (Currently Amended) ~~Recording~~ The recording apparatus as claimed in claim 8, wherein said memory means ~~(8)~~ comprise a MRAM unit.

11. (Currently Amended) ~~Recording~~ A method for recording information on a recordable record carrier ~~(7)~~ having a user area ~~(UA)~~ for storing user data and a management area ~~(MA)~~ for storing management data, said method comprising the ~~steps~~ acts of:

[[-]] reading main file system data ~~(MFS)~~ of a main file system stored in a main file system area ~~(70)~~ of said management

area ~~(MA)~~,

[[~~-~~]] converting said main file system data ~~(mFS)~~ into said virtual file system data ~~(vFS)~~ for storage on the record carrier ~~(7)~~ and/or for output to an external host device ~~(2, 3)~~,

[[~~-~~]] storing said virtual file system data ~~(vFS)~~ in a virtual file system area ~~(71)~~ of said management area ~~(MA)~~ in raw format,

[[~~-~~]] storing an indicator ~~(ID)~~ indicating whether the main system data ~~(mFS)~~ and the virtual file system ~~(8)~~ data ~~(vFS)~~ are consistent in an indicator area ~~(72)~~ of said management area ~~(MA)~~.

12. (Currently Amended) ~~Recording A~~ method for recording information on a recordable record carrier ~~(7)~~ having a user area ~~(UA)~~ for storing user data and a management area ~~(MA)~~ for storing management data, said method comprising the ~~steps~~ acts of:

[[~~-~~]] reading an indicator ~~(ID)~~, which indicates whether main file system data ~~(mFS)~~ of a main file system stored in a main file system area ~~(70)~~ of said management area ~~(MA)~~ and virtual file system data ~~(vFS)~~ of a virtual file system stored in raw format in

a virtual file system area ~~(71)~~ are consistent, from an indicator area ~~(72)~~ of said management area ~~(MA)~~,

[[-]] reading said main file system data ~~(mFS)~~ from said main file system area ~~(70)~~ and reconstructing at least part of said virtual file system data ~~(vFS)~~ from said main file system data ~~(mFS)~~ if said indicator ~~(ID)~~ indicates an inconsistency,

[[-]] reading at least part of said virtual file system data ~~(vFS)~~ from said virtual file system area ~~(71)~~, and

[[-]] exposing the virtual file system data ~~(vFS)~~ to an external host device ~~(2)~~.

13. (Currently Amended) ~~Recording~~ The method as claimed in claim 12, further comprising the ~~steps~~ acts of:

[[-]] setting the indicator ~~(ID)~~ such that it indicates an inconsistency if the virtual file system data ~~(vFS)~~ and/or the main file system data ~~(mFS)~~ are changed, and

[[-]] storing the set indicator ~~(ID)~~ in said indicator area ~~(72)~~.

14. (Currently Amended) ~~Computer~~ A computer readable medium

embodying a computer program, the computer program comprising
computer program means for causing a computer to perform the steps
acts of the method as claimed in claim 11 when said computer
program is run on a the computer.

15.(New) A device comprising:

a head for at least one of reading from and writing on a first
memory at least one of main data and virtual data;

a converter configured to read an indicator from the removable
memory and to convert main data to virtual data if the indicator
indicates an inconsistency between the main data and the virtual
data, and otherwise read the virtual data; and

a second memory for storing the virtual data.

16.(New) The device of claim 15, wherein the virtual data
includes a static part and a volatile part, and wherein only the
volatile part is reconstructed from the main data based on the
indicator.

17.(New) The device of claim 15, wherein the indicator

comprises last update dates of the main data and of the virtual data.

18. (New) The device of claim 15, wherein the indicator comprises a flag which is set when the virtual data are updated, indicating that the virtual data are valid, and which is reset when the main data are updated independently, indicating that the virtual file system data are invalid.

19. (New) The device of claim 15, wherein the indicator is stored in at least one of a disk navigation area of the first memory, a logical volume integrity descriptor of the first memory, and a chip in the first memory.

20. (New) The device of claim 15, wherein the first memory is a removable memory.

21. (New) The device of claim 20, wherein the indicator is stored upon an unmount command of the removable memory.